FIU proposes to design, develop, and pilot the *TerraFly MobilityConcierge*, an automated human-assisted transportation concierge system, which will provide pre-trip and en-route traveler guidance, recommendations, and concierge services, especially addressed to people with cognitive impairments, adults without technology experience, individuals with low vision, hearing impairments, and people with different degrees of mobility impairments. The product will include web-based applications for a PC and smart-phone apps, which provide the traveler with better mobility, autonomy, and self-confidence, while optimizing the caregiver’s supportive efforts and providing support to the transportation services agencies: a traveler concierge system and guidance applications that works in unison with a companion app designed for caregivers and transportation providers.

The *MobilityConcierge* app and website assists users with pre-trip planning, if necessary with the help of a connected caregiver. This app shows a video clip of the proposed route, including textual and audio descriptions of landmarks and navigation points. The app enables its users to create scenarios using different modes and accessibility options custom-tailored to the user’s personal profile. Once the user embarks on the trip, *MobilityConcierge* gives detailed guidance on navigation, including waypoints, landmarks, and mode changes. The system shows public transit options in simplified language and in accordance with the Americans with Disabilities Act, while balancing accessibility information with the user’s personal abilities. The system interfaces with providers of parking and paratransit or last-mile transportation, providing information and guidance to help users’ transition to fixed route, community transit, and rapid transit services. The app’s design is sensitive of varying screen size and includes a visual mode to be used on tablets or smart-phones with larger displays, to enable people with low vision to utilize its potential. Should users require assistance or concierge services beyond the app’s own services, they can request to be connected via chat or video call to a designated caregiver or concierge.

The system will be tested, evaluated and iteratively improved in two tiers: initially in co-operation with the Senior Center in Sweetwater, Florida, and later in co-operation with Neuroscience Centers of Florida Foundation.

The Team is leveraging $10M in NSF-funded science and has developed preliminary demos and mockups (e.g. virtual trip videos), as shown at [http://CAKE.fiu.edu/ATTRI/](http://CAKE.fiu.edu/ATTRI/), a portal to the proposal, letters, demos, and DOT material (e.g. the CFP is [http://cake.fiu.edu/ATTRI/CFP_Am1.pdf](http://cake.fiu.edu/ATTRI/CFP_Am1.pdf))